Clymac

Fire Systems Installation Manual

Welcome to Clymac Fire Systems

The Clymac ZP2 & ZP3 analogue addressable fire alarm systems are both flexible and easy to install. This pocket sized installation manual is designed to provide quick reference information at each stage of your installation.

The manual offers practical system installation guidance using an easy to follow format. It deals with the various system architectures using colour coding to identify the type of connection followed by individual installation information for each product.

More detailed guidance is given separately for our specialist products, interfacing arrangements and cable types to ensure they are fully explained.

Please make use of our Installation Helpline if you require any further support. Your call to the helpline goes directly through to our team of technical support engineers who are trained to provide an instant response.

LPS 1014 Certificated Fire Detection and Alarm System Firm Certificate No CFA-154

LPS 1204 Certificated Fixed System Installer Certificate No. CFSI-018

Assessed to ISO 9001:2000 Certificate No. 687

Certificate No. NAC/G/3213

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1 Wiring guide

Networks and Redcare

Loop devices

24Vdc alarm devices & external PSU

Isolators

Interfacing

Complying with BS 5839 Pt 1

Beam detection

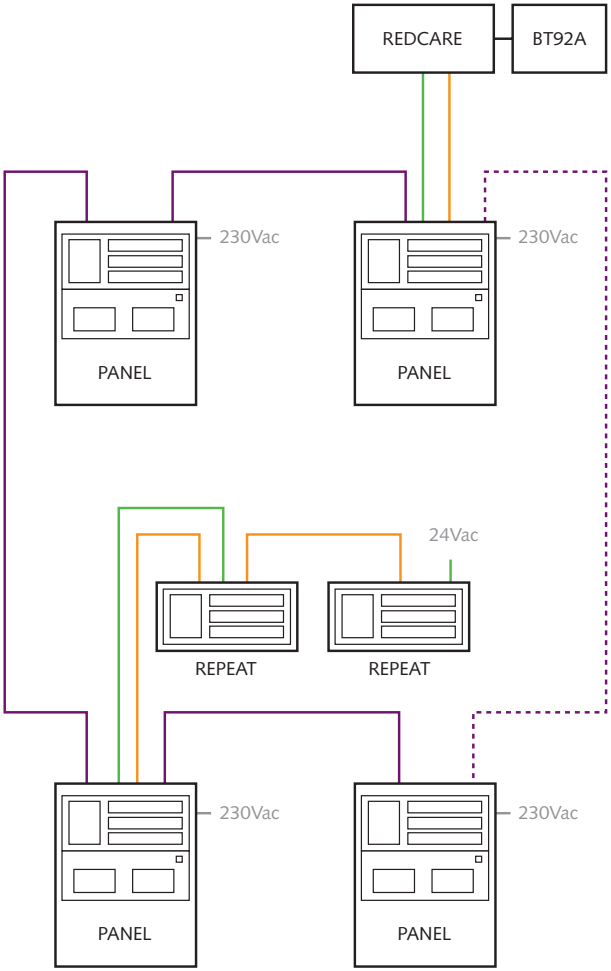
Intrinsically safe equipment

Voice sounders

Duct detection

Approved cables

Disabled refuge & toilet alarm



ZP3 standard networks (ZP3-NW1)

- Enhanced cable (see page at the end of this section).
- 600 – 1000m total depending on cable type.
- Spurs, star connections, radials or combinations allowed.
- Represented by solid purple line.

ZP3 secure networks (ZP3-NW1 and ZP3-NLM)

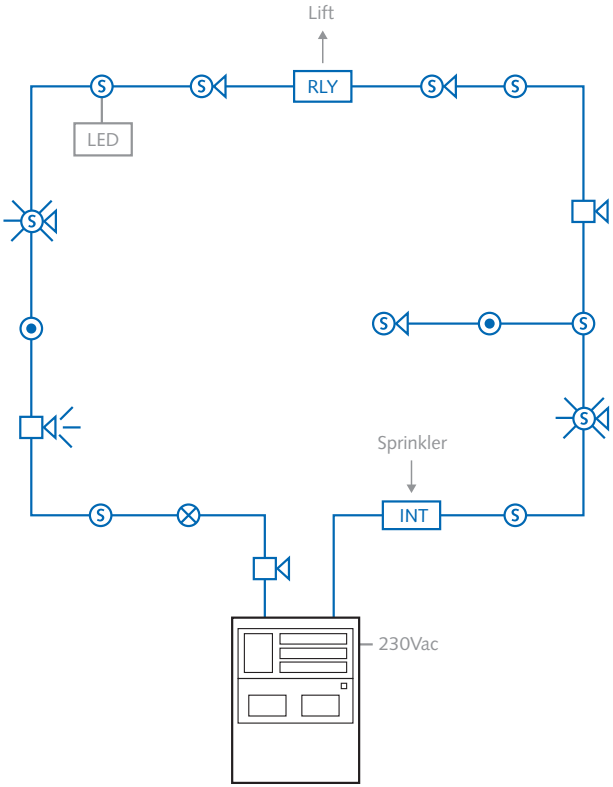
- Enhanced or standard cable (see page at the end of this section).
- 600 – 1000m between panels depending on cable type.
- Ring connections only.
- Represented by solid and dotted purple line.

Repeat panels (ZP3-RDU/ZM2-RDU)

- 24Vdc via main panel or PSU, represented by green lines.
- Data cable from main panel, represented by orange lines.
- Star, radial or spur connections allowed.
- Enhanced or standard cable (see page at the end of this section).
- 4-core cable should not be used.

Redcare (ZREDCARE...)

- 24Vdc via main panel or PSU, represented by green line.
- Two core cable for each signal, represented by orange line.
- BT Redcare BT92A block (installed by BT) local to Redcare box.
- Analogue lines not exceeding 3 REN can be used.
- Lines cannot be through PABX systems.
- Lines that use data cannot be used.
- Allow 3 weeks once all information is provided to Clymac.



Key

- Short circuit isolator
- Addressable manual call point
- Addressable sounder
- Addressable sensor and sounder beacon
- Addressable sounder and beacon
- Addressable sensor
- Addressable sensor and sounder
- Addressable relay
- Addressable interface

Addressable detection loops

- Available with 1, 2 or 4 loops.
- All devices colour coded blue in further sections can be connected to these circuits.
- Cable should be Standard or Enhanced (see page at the end of this section).
- Spurs off the loop are possible without special bases/ devices, subject to agreement with all parties.
- Basic rules for loop design;

1 127 address maximum, 1 device = 1 address (combined sensor/sounder = 2 addresses).

2 1km or 2km maximum (loop powered sounders = 1km) Based on 1.5mm 2 core cable.

3 Continuous screen preferably not connected to building earth.

4 300mm separation from high voltage cables.

5 Remote LED's can not be connected to sounder bases.

6 Maximum of 16 isolators per loop.

7 Addressable sounders;

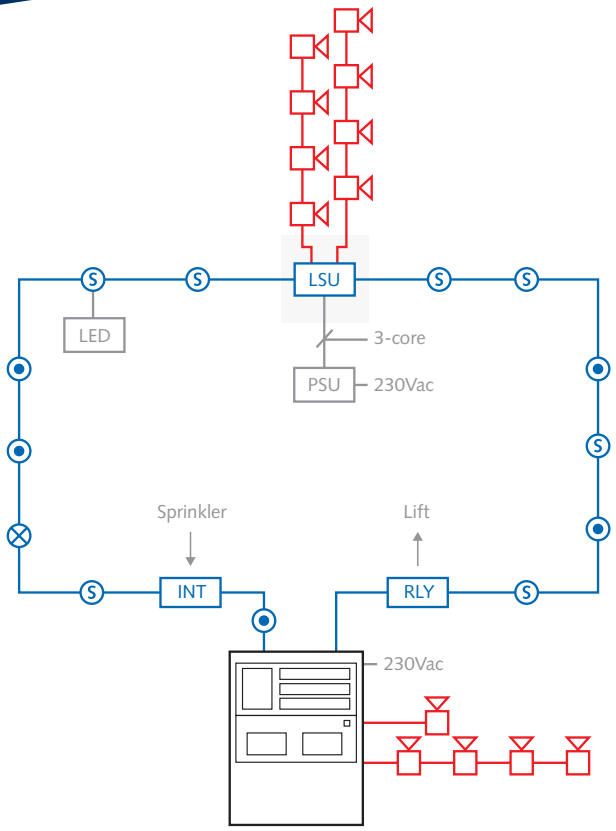
A) Sounder bases - 60 number per loop; or

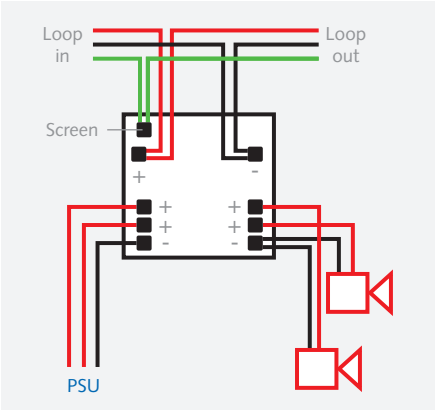
B) Sounder/beacon bases - 40 number per loop; or

C) Horn sounders - 40 number per loop; or

D) Horn sounder/beacons - 25 number per loop; or

E) Beacons - 60 number per loop.





24Vdc Conventional alarm circuits

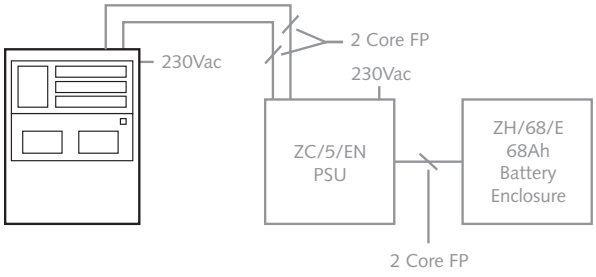
- ZP3 available with 4 circuits, ZP2 with 2 circuits per loop.
- Further circuits added by using Z752 interface or 8 way auxiliary boards (ZP3 only).
- All devices colour coded red in further sections can be connected to these circuits.
- Enhanced or standard cable (see page at end of this section).
- Strictly radial connection only, no spurs.
- End of line resistor fitted in last device on each circuit.

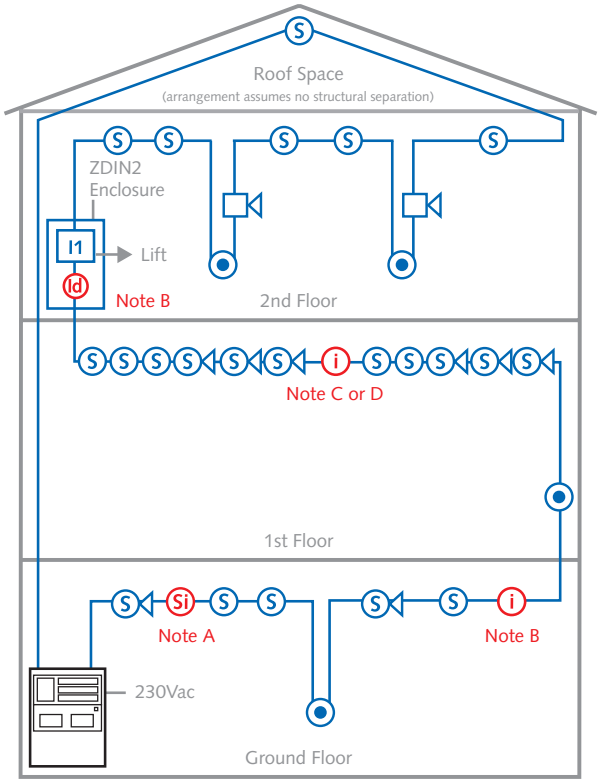
Key

⊗	Short circuit isolator	Ⓢ	Addressable sensor
◉	Addressable manual call point	RLY	Addressable relay
	24Vdc sounder	INT	Addressable interface
LSU	Addressable sounder interface		

* Sounder closest to control panel to be installed on dedicated circuit.

Configuration when using external batteries and chargers





Short circuit isolators (Z60D or Z7-IB)

- Fitted to the loops (blue circuits).
- Maximum 16 per loop.
- Do not take an address.
- Not to be fitted to spurs, loop only.
- Ideally not concealed from view.
- Distributed as shown;

A) Sounder nearest the panel

B) Each change of floor within 5 devices

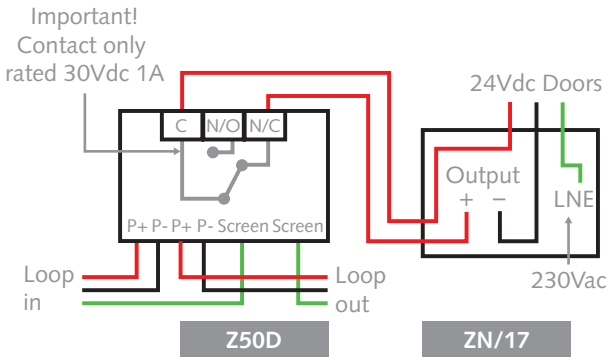
C) Every 32 trigger devices

D) Every 2000msq

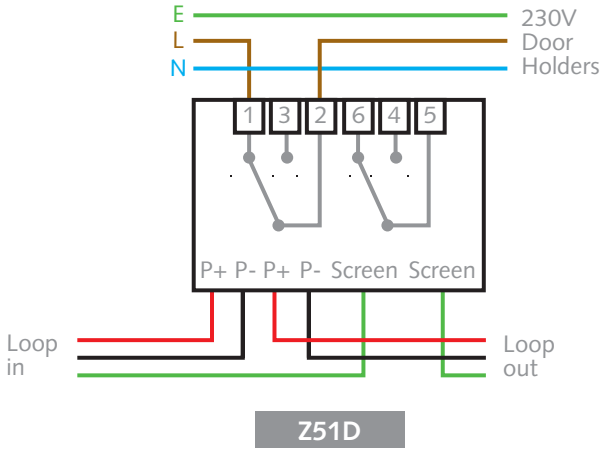
Key

Isolator base C/W blanking cover	Addressable sensor
Combined sensor and isolator	Addressable manual call point
DIN mounted isolator	DIN mounted output contact
Addressable sensor and sounder	Addressable sounder

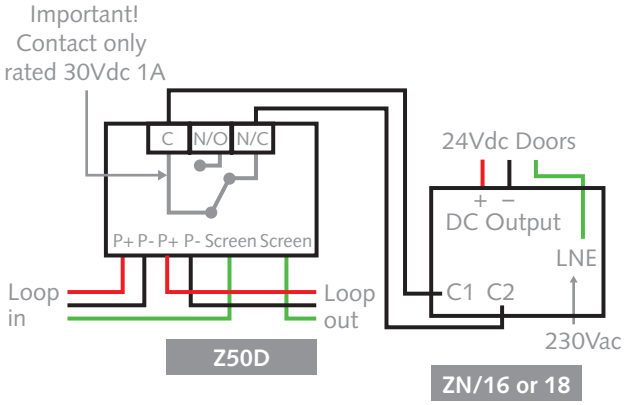
24Vdc door holders



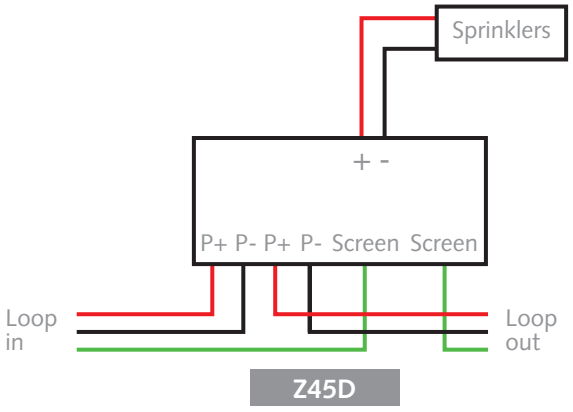
230Vac door holders



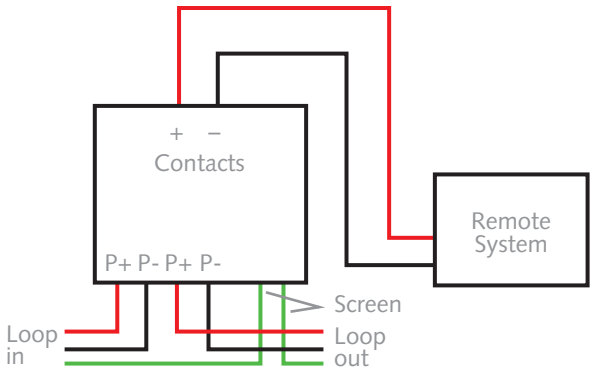
24Vdc door holders



Input monitoring - eg sprinklers

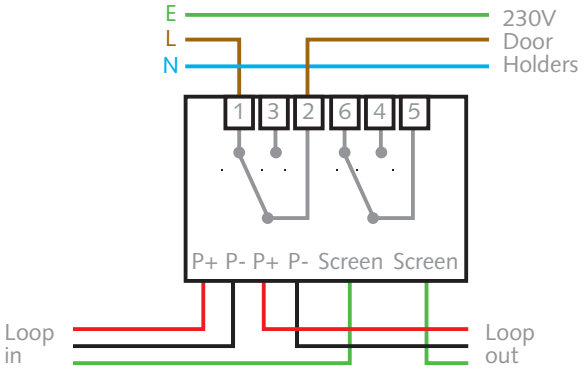


Input monitoring - eg fire/fault from remote system



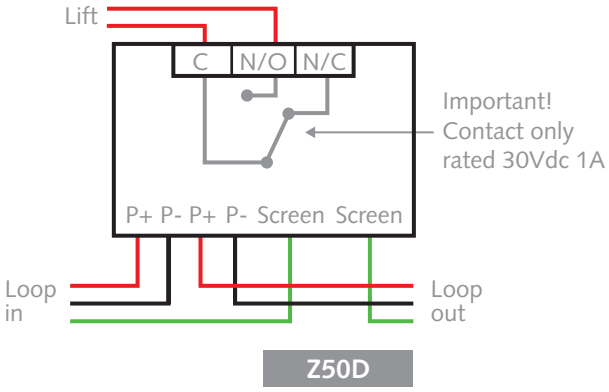
Z45D

Output contact - eg gas valve (230Vac)



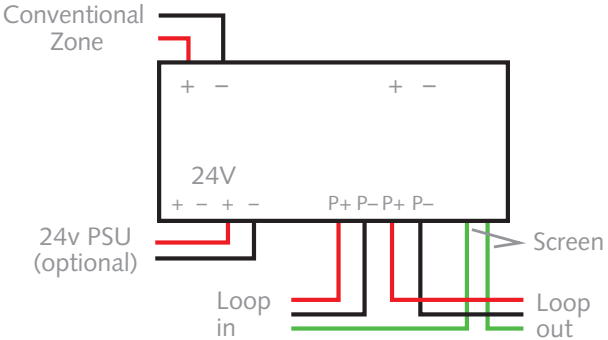
Z51D

Output contact - eg lift



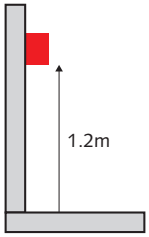
Z50D

Conventional zone

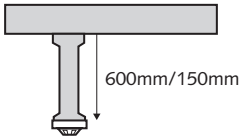


Z70D

Optional PSU is needed where a large number of Z70D's are connected to one loop – seek advice from Clymac.

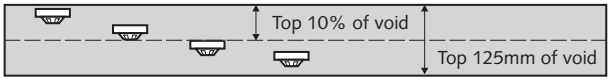


MCP's at least 15mm proud of wall and 1200mm above floor.

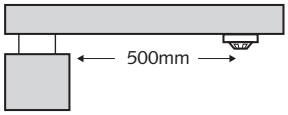


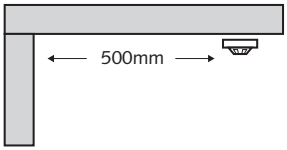
Smoke/beam detector distance from ceiling = 25mm to 600mm.

Heat detector distance from ceiling = 25mm to 150mm.

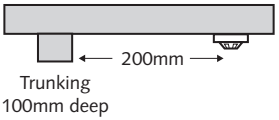


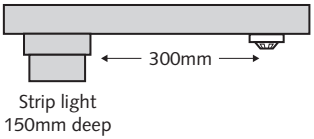
Detectors in unventilated voids to be mounted in the top 10% or 125mm, whichever is greatest.



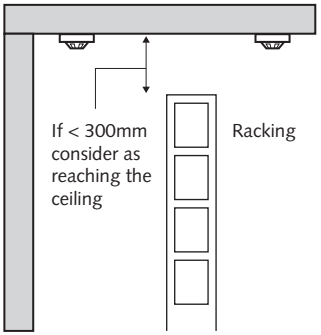


Detectors should not be mounted within 500mm of obstructions such as walls, beams or ductwork greater than 250mm in depth.

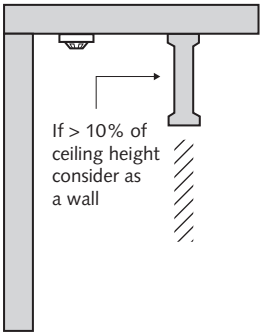




Detectors should be mounted twice the depth of any obstructions such as beams, ductwork or light fittings less than 250mm in depth.

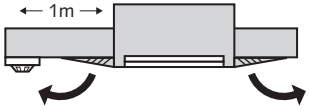


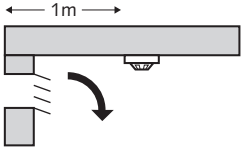
Partitions or racks within 300mm of ceiling to be treated as full height.



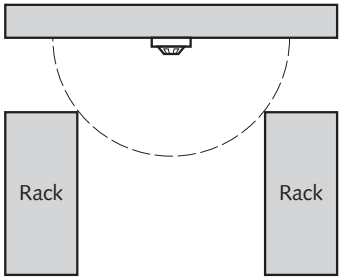
Structural beams greater than 10% of ceiling height to be treated as wall.

Applies to point detection and beam detection.

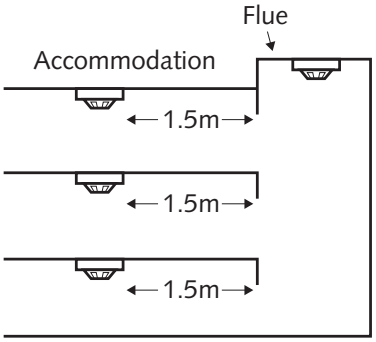




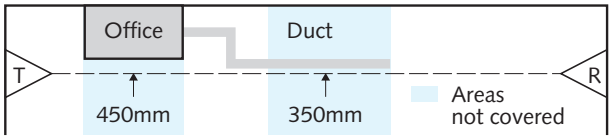
Detectors should be mounted minimum of 1 metre away from a forced ventilation system.



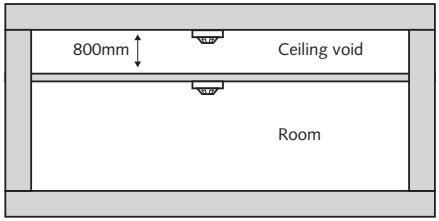
500mm clear space to be maintained below each detector.



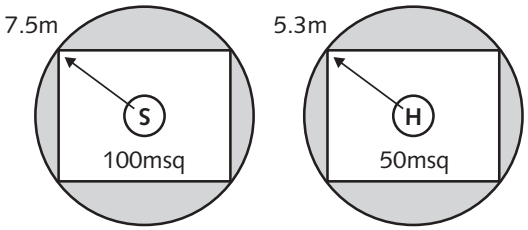
A detector should be mounted within 1.5m away from a vertical shaft such as a lift at each level. A detector should also be fitted at the top of the shaft (Excludes L4, L5 & P2).



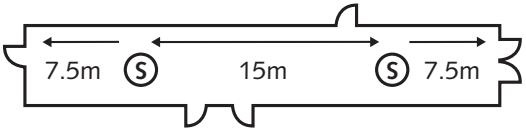
Beams not to run closer than 500mm to any wall, partition or obstruction.



Any area covered by automatic detection that contains a horizontal void of 800mm or more in height, automatic fire detection should also be provided in the void.

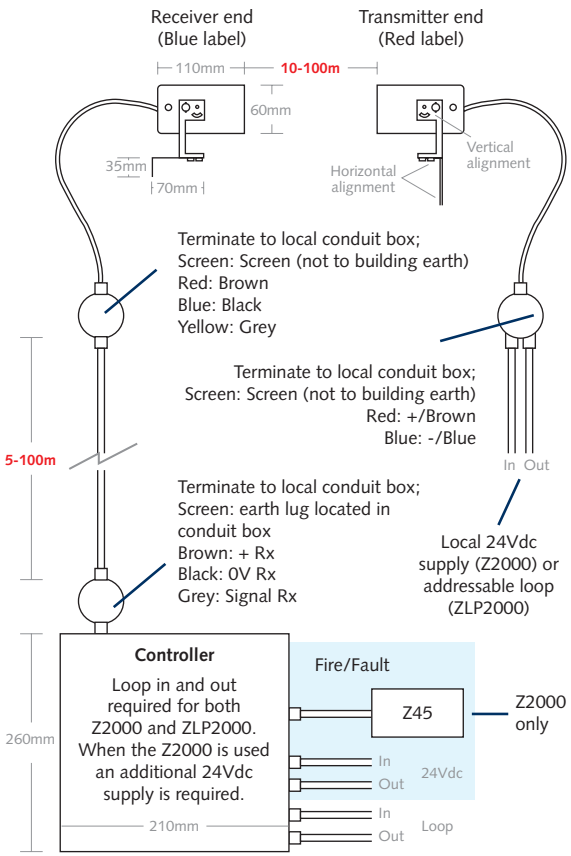


- This is the General Coverage of Heat and Smoke Detector types based on a flat ceiling.
- You can add 1% to this for each degree a ceiling is angled (Maximum of 25% allowed).
- Heat Spacing also applies to Multi-sensors & Combined Smoke/Heat Detectors.



- Applies to corridors less than 2m in width.
- For wider corridors normal detector spacing applies (i.e. 10m and 7m).
- Only Smoke detectors or a mixture of Smoke & CO detectors should be used in corridors & escape routes.

Addressable and conventional versions of the beam detector are available. The following notes describe the connections for both.



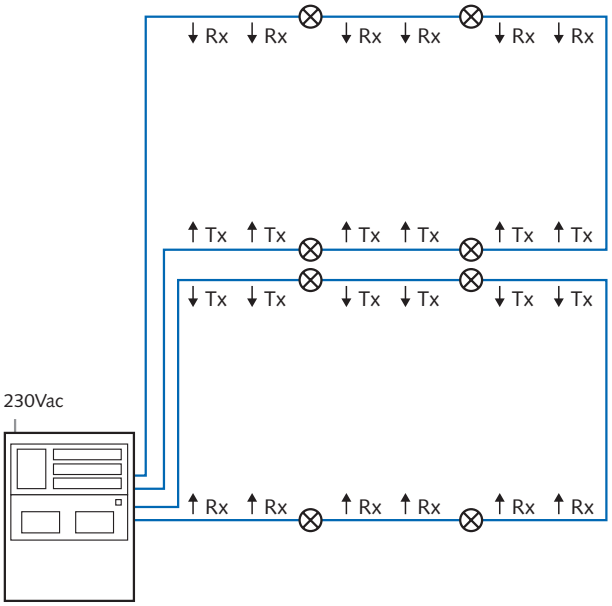
Tx and Rx must be securely mounted to either main structural steels or brickwork only.

Internal connections

Connection	Loop +	Loop -	Loop screen	24V +	24V -	Earth
Conventional Z2000*	Z45D	Z45D	Z45D	Supply +	Supply -	⏚
Addressable ZLP2000	Loop +	Loop -	Screen	N/A	N/A	N/A

* Contact installation helpline for advice on system architecture.

Architecture for loop powered beams (ZLP2000).

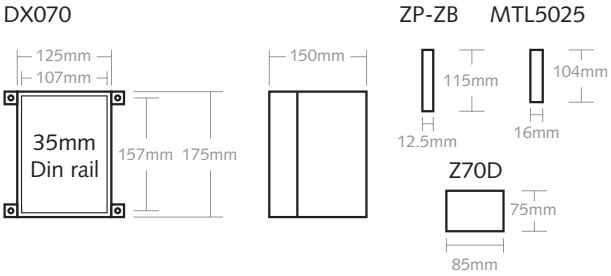


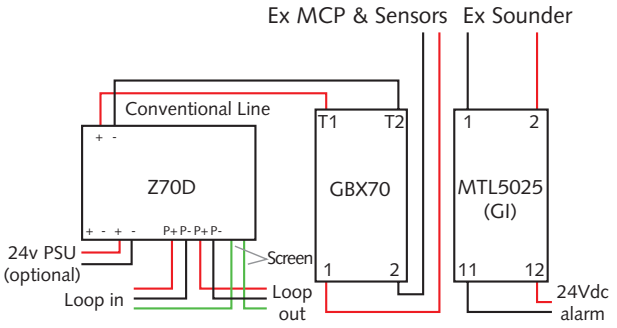
Key

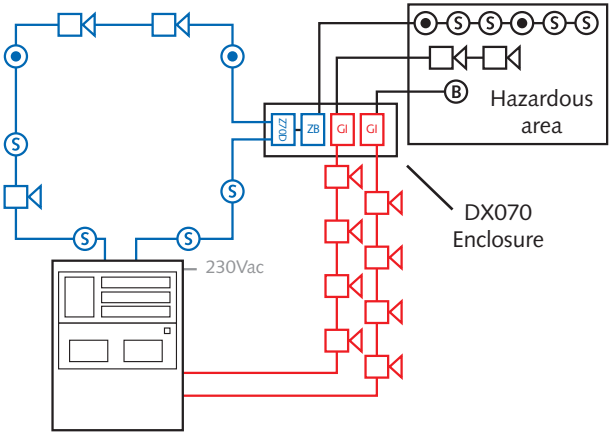
⊗	Z60D or Z7-IB short circuit isolator
↑ Tx	High level transmitter
↑ Rx	Low level controller connected via dedicated 3 core to high level receiver

Notes

- Controllers mounted low level.
- Even distribution throughout the loop.
- 6 beams maximum with 1km loop length (No loop powered sounders).
- Minimum of 8m between beam sets.
- All mounted 300mm - 600mm from the ceiling.
- See BS siting section.
- See isolator section.







I.S. Earth Note

The GBX70 galvanic isolator does not require a dedicated I.S earth. The MTL5025 galvanic isolator also does not need a dedicated I.S. earth. Any Screens/Earths not wired in the diagram opposite should be terminated separately inside the enclosure to a suitable building earth.

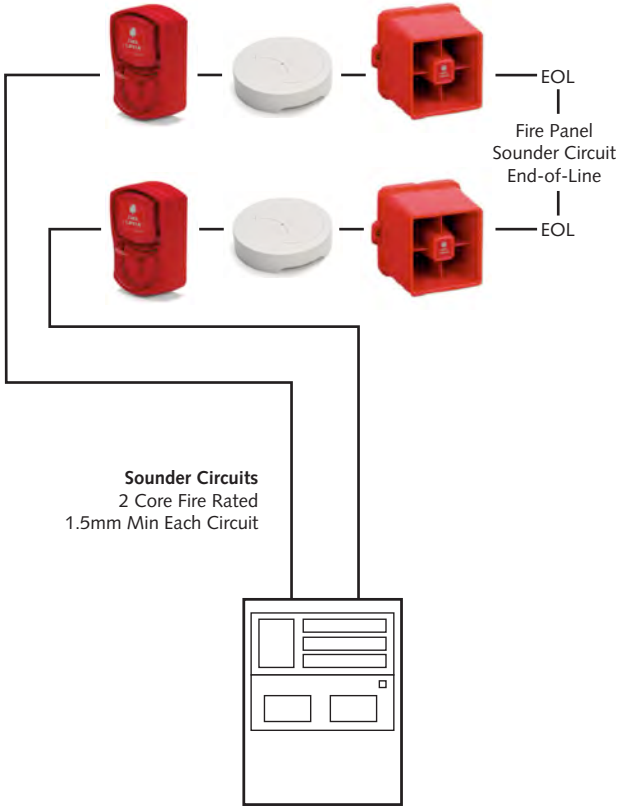
Notes

- All barrier equipment must be installed outside the hazardous zone.
- One Z70D conventional interface/galvanic isolator can drive a maximum of 15 devices.
- One galvanic isolator can drive either one I.S. beacon or two I.S. sounders. The output produced by the sounder is relatively low.
- The equipment is made from non conductive materials. The installer and user should ensure it is not installed in areas that would lead to a build up of electrostatic charge such as areas with high pressure steam.
- Cleaning of equipment should be with a damp cloth.
- The sounder circuits in the hazardous area not monitored for fault.
- Screens used for alarm circuits and detector circuits must not be connected to building earth via conduit boxes or switch boxes.
- ATEX Ex II1G.

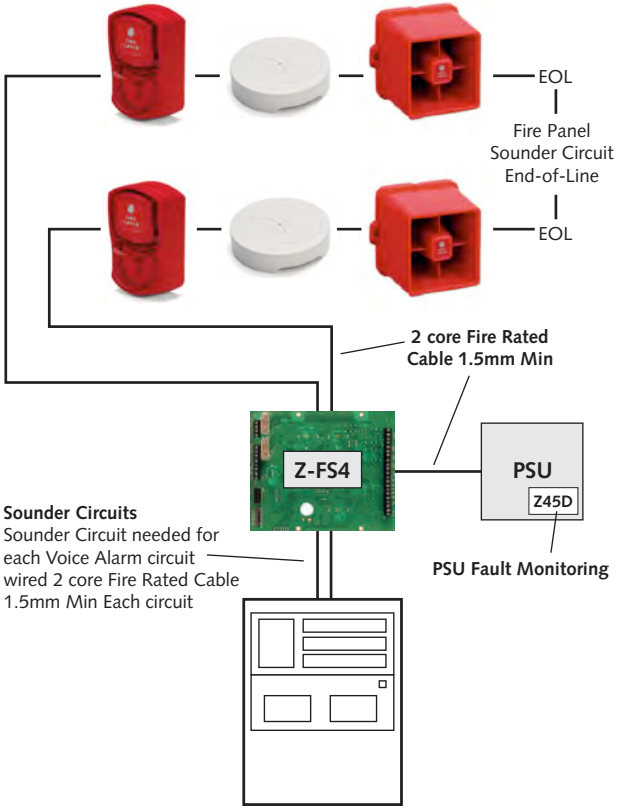
Key

I.S. conventional sounder	Addressable sensor
I.S. addressable sounder	Addressable manual call point
I.S. addressable manual call point	Addressable sounder
I.S. conventional beacon	Addressable Conventional Interface
Zenner Barrier (GBX70)	Galvanic isolator (MTL5025)
24Vdc alarm sounder	

Single Message Use

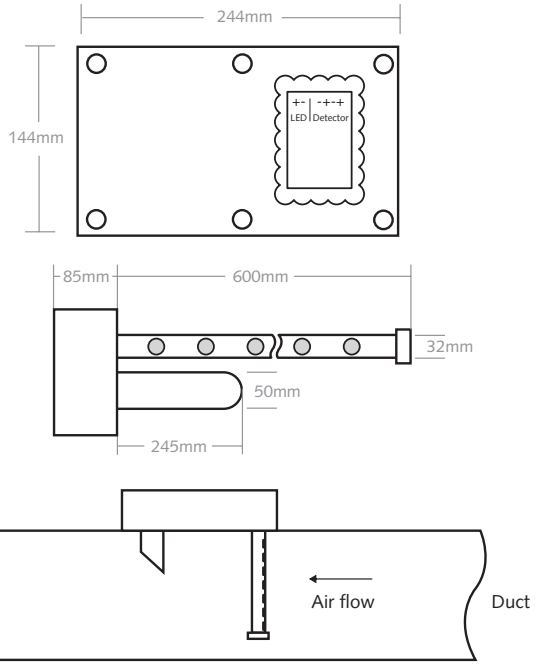


- Note all sounder circuits used for Voice Alarm have to be synchronised together.
- Contact Clymac for detailed support on Maximum circuit loads/lengths.

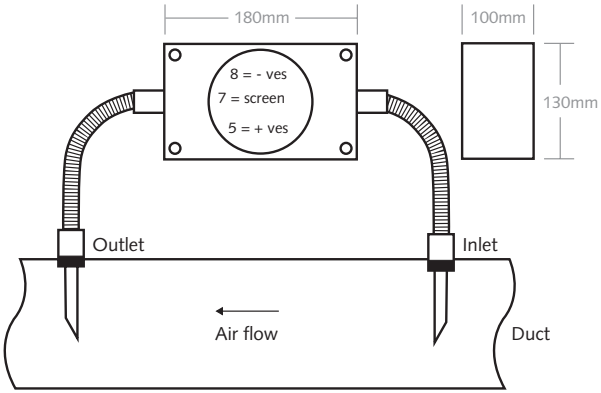


- Note all voice sounders connected to Z-FS4 board are synchronised even if the fire panel sounder circuit inputs are not.
- Alert Message is activated by a pulsing fire panel sounder circuit input (NOTE ZP3 on-board sounder circuits cannot be pulsed – need to fit MA8 board).
- Evac message is activated from a steady fire panel sounder circuit input.
- Other messages can be activated by shorting inputs C,D,E,F to 0v.
- Contact Clymac for detailed support on Maximum circuit loads/lengths and more information.

Z-DPU Duct Detector



Z-DPU/FH Duct Detector



Clymac use two types of duct detector as shown. Both use the same principles of positive and negative pressure to force a sample through the detector, as such some common rules apply;

1. Three times the width of the duct away from any bend, branch or reducer,
2. Designed to work with linear air flow 1m/s - 8m/s,
3. The body of the detector must be completely sealed.

Z-DPU Duct Detector

1. Designed to be fixed directly to the flat surface of the duct.
2. To help achieve a good seal the unit comes complete with; rear gasket, rubber strip between connection/ detection chambers.
3. Use knockouts provided for cable entry.
4. When modifying the pipes to fit the duct each must be proportionally reduced. The inlet pipe will require a 32mm UPVC end cap (glued on). The outlet must be cut at a 40 degree angle.

Z-DPU/FH Duct Detector

1. Designed to be fixed away from the duct.
2. To help achieve a good seal the enclosure is designed to be fixed to the surface using the same fixing centres as the lid.
3. All cable entries must be sealed with suitable glands.
4. Each entry into the duct requires a 32mm hole. This is sealed with the 32mm ribbed grommets supplied.
5. Inlet & outlet should be inline and approx 450mm apart.

Standard cables

Manufacturer	Name
AEI Cables Ltd (Durham)	Firetec Multicore LSZH
Cavicel SpA	Firecel SR/114 H
Doncaster Cables	Firesure
Draka UK Ltd	Firetuf EMC
Haani Cables Ltd	Firecool
Irish Driver-Harris Company Ltd	Kilflam 2000
Pirelli Cables Ltd	FP200 Gold LSOH
Pirelli Cables Ltd	FP400
Tratos Cavi SpA	Fire-safe TW950
Tyco Thermal Controls Canada Ltd	Pyrotenax PYRO-S
Ventcroft Ltd	Noburn Platinum

Suitable for;

1 Secure networks when cable routes are diverse.

2 All other circuits excluding standard networks, where the building has a sprinkler system or;

   A) Is less than 30m high; or

   B) Is going to be evacuated in 1, 2 or 3 phases; or

   C) No people will remain in occupation during a fire.

3 Enhanced cable may also be required as part of a specification or on basis of a risk assessment.

4 The Pirelli FP400 cable compiles with BS6387 C, W and Z. At the time of writing no LCPB approved standard or enhanced grade cable with an armour was available. Also, in the absence of a screen the armour should be used. It should be noted that all efforts to avoid interference need to be made and ELV ducts must be used. Limited use only, please contact the help line.

5 The Draka Firetuf EMC should be used in applications where a risk of electrical or radio interference is anticipated, such as Airports.

Enhanced cables

Manufacturer	Name
AEI Cables Ltd (Durham)	Firetec Enhanced Multicore LSZH
Cavicel SpA	Firecel SR/114 E
Draka UK Ltd	Firetuf Plus
Irish Driver-Harris Company Ltd	Kilflam 3000
Pirelli Cables Ltd	FP Plus
Pirelli Cables Ltd	FP200 Plus Flex
Tyco Thermal Controls Canada Ltd	Pyrotenax Mic (light duty)
Ventcroft Ltd	Noburn Diamond
Wrexham Mineral Cables	Wrexham Mic

Suitable for;

1 Standard networks.

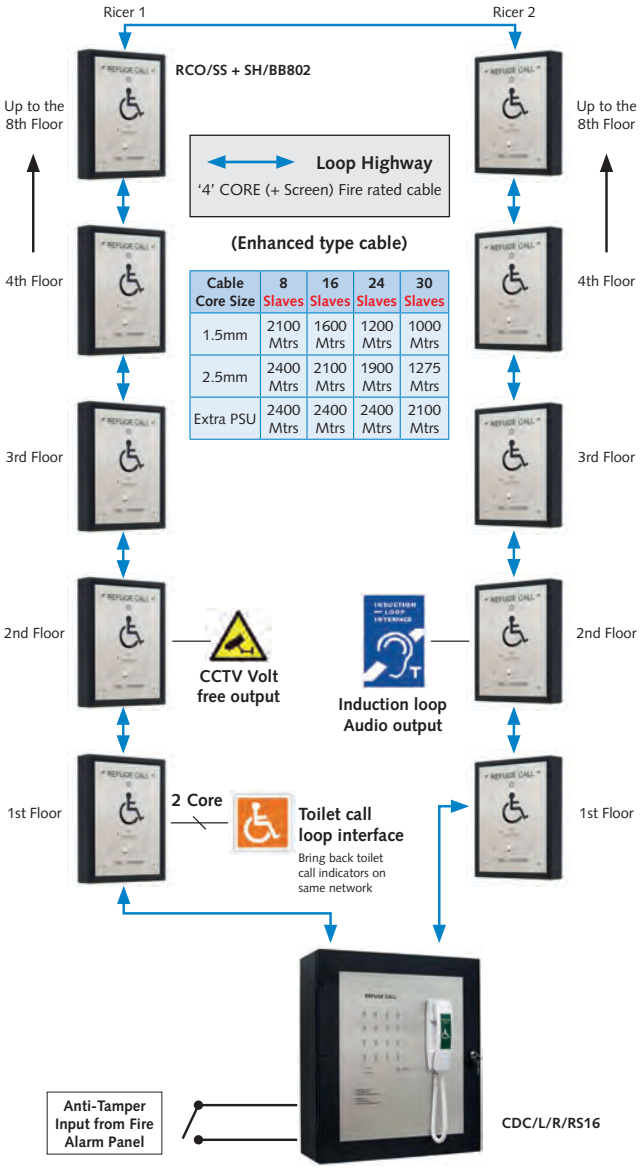
2 Should be used on all circuits, where the building has no sprinkler systems and;

   A) Is more than 30m high; or

   B) Is going to be evacuated in 4 or more phases; or

   C) People will remain in occupation during a fire.

Loop wired 16 line disabled refuge call system

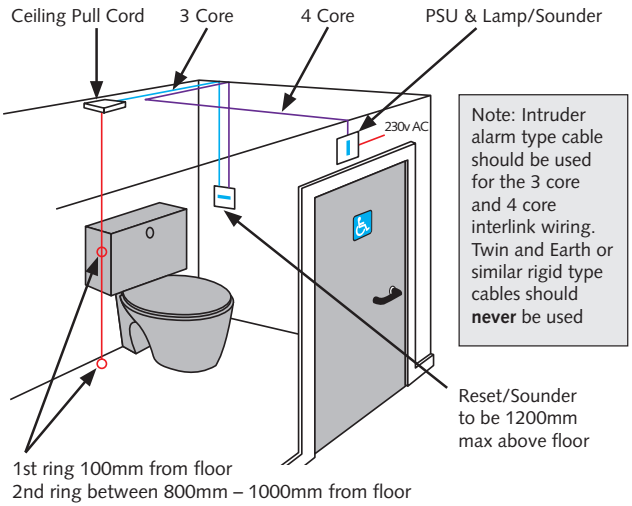


Cable Core Size	8 Slaves	16 Slaves	24 Slaves	30 Slaves
1.5mm	2100 Mtrs	1600 Mtrs	1200 Mtrs	1000 Mtrs
2.5mm	2400 Mtrs	2100 Mtrs	1900 Mtrs	1275 Mtrs
Extra PSU	2400 Mtrs	2400 Mtrs	2400 Mtrs	2100 Mtrs

Radial wired disabled refuge call system

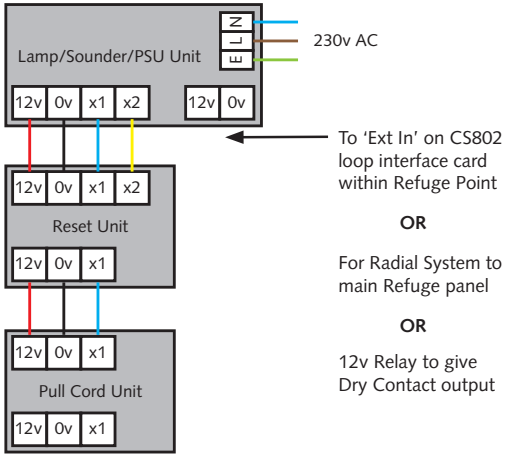
Staircore 1 West
Staircore 2 East
2nd Floor
RCO/SS + SH/BB
1st Floor
2 Core (Enhanced Fire Rated)
Toilet call loop interface
Bring back toilet call indicators on same network
2 Core
Toilet call loop interface
Bring back toilet call indicators on same network
2 Core
DISABLED REFUGE CALL
Note: Toilet call signals must be wired to the main panel on a radial system
CDC/R/RS4 Master
Anti-Tamper Input from Fire Alarm Panel

Hark 1 Disabled refuge toilet alarm

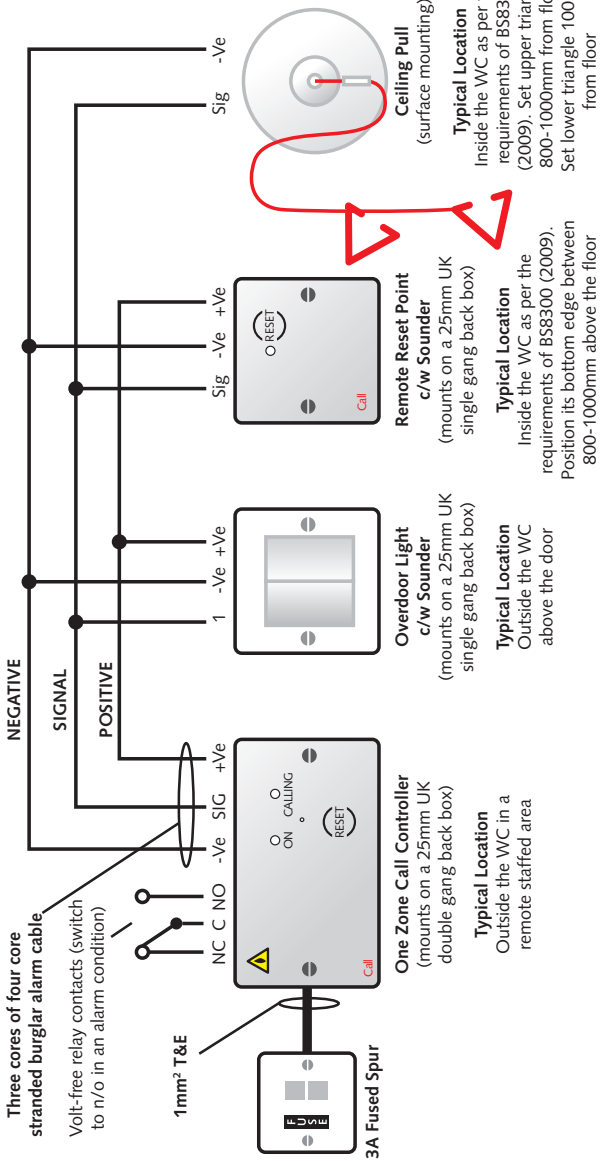

Ceiling Pull Cord
3 Core
4 Core
PSU & Lamp/Sounder
230v AC
Note: Intruder alarm type cable should be used for the 3 core and 4 core interlink wiring. Twin and Earth or similar rigid type cables should **never** be used
Reset/Sounder to be 1200mm max above floor
1st ring 100mm from floor
2nd ring between 800mm – 1000mm from floor

Hark 1 Disabled refuge toilet alarm

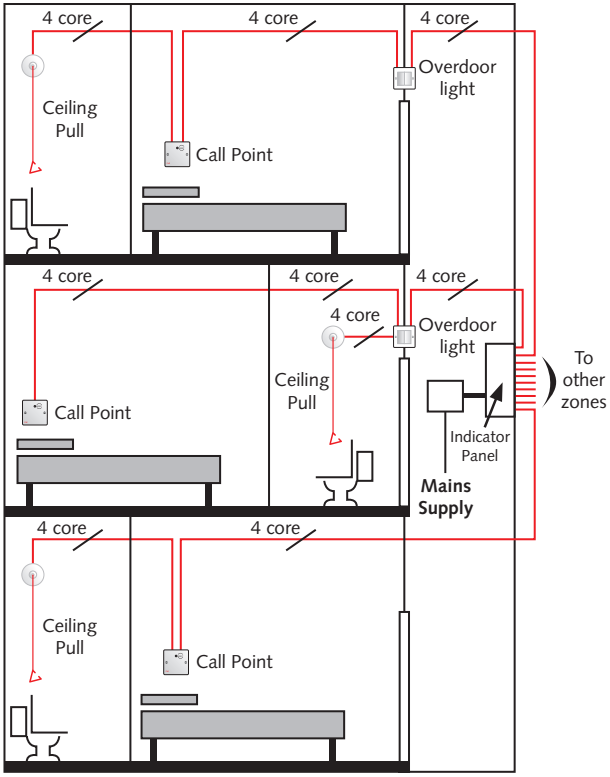
- Use as a stand-alone toilet alarm system or for interfacing into our disabled refuge system



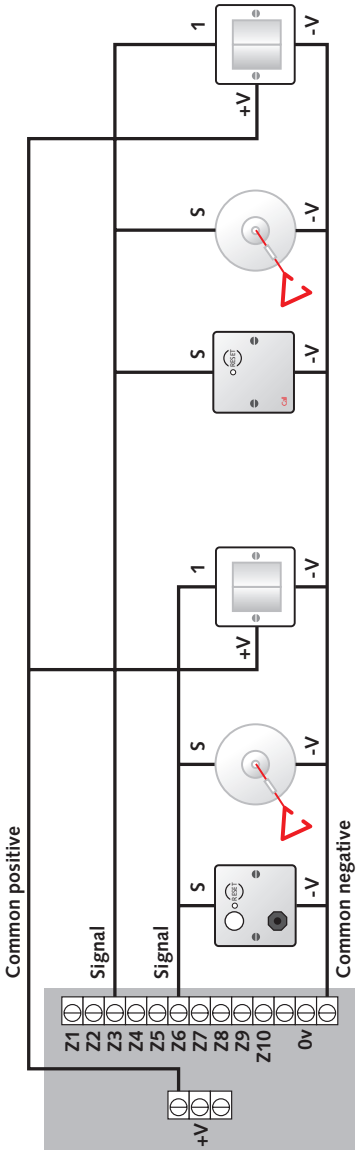
Single zone panel


NEGATIVE
SIGNAL
POSITIVE
Sig -Ve
Ceiling Pull
(surface mounting)
Typical Location
Inside the WC as per the requirements of BS8300 (2009). Set upper triangle 800-1000mm from floor. Set lower triangle 100mm from floor
Sig -Ve +Ve
RESET
Call
Remote Reset Point c/w Sounder
(mounts on a 25mm UK single gang back box)
Typical Location
Inside the WC as per the requirements of BS8300 (2009). Position its bottom edge between 800-1000mm above the floor
1 -Ve +Ve
Overdoor Light c/w Sounder
(mounts on a 25mm UK single gang back box)
Typical Location
Outside the WC above the door
NC C NO -Ve SIG +Ve
ON
CALLING
RESET
Call
One Zone Call Controller
(mounts on a 25mm UK double gang back box)
Typical Location
Outside the WC in a remote staffed area
Three cores of four core stranded burglar alarm cable
Volt-free relay contacts (switch to n/o in an alarm condition)
1mm² T&E
FUSE
3A Fused Spur

10-30 zone panel



10-30 zone panel wiring connections



2 Panel information

ZP3 panel

ZP2 panel

Batteries and enclosures

ZP3-1-240 - Single loop panel

Loops	Height	Width	Depth	Supply	Loop Terminations	24V alarm Terminations
1	540mm	410mm	137mm	230Vac 0.75A	See diagram A	See diagram B

ZP3-2-240 - 2 loop panel

Loops	Height	Width	Depth	Supply	Loop Terminations	24V alarm Terminations
2	540mm	410mm	137mm	230Vac 0.75A	See diagram A	See diagram B

ZP3-4-240 - 4 loop panel

Loops	Height	Width	Depth	Supply	Loop Terminations	24V alarm Terminations
4	540mm	410mm	137mm	230Vac 0.75A	See diagram A	See diagram B

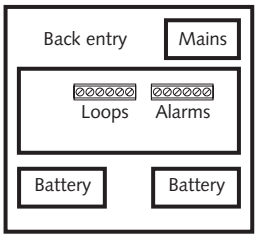
Diagram A
Loop Terminations

Out Loop 1 In
+ - screen + - screen

Diagram B
24V Alarm Terminations

Sounder 2 Sounder 1
+ - screen + - screen

Top entry



ZP3-FC - Flushing collar

Loops	Height	Width	Depth	Supply
0	647mm	512mm	20mm*	N/A

*Depth of panel once recessed.

- Wall cut out size:
  Height 570mm
  Width 440mm
  Depth 120mm

ZP3-RDU-B - Repeat panel

Loops	Height	Width	Depth	Supply
0	220mm	360mm	60mm	24Vdc 90mA

ZP2-F1-S-03 - 1 Loop Panel - Small Cabinet

Loops	Height	Width	Depth	Supply	Battery Backup
1	298mm	410mm	162mm	240Vac 3.0A	2 x 12v 7Ah

ZP2-F2-S-03 - 2 Loop Panel - Small Cabinet

Loops	Height	Width	Depth	Supply	Battery Backup
2	298mm	410mm	162mm	240Vac 3.0A	2 x 12v 7Ah

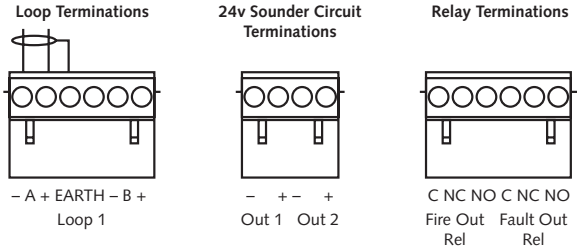
ZP2-F1-03 - 1 Loop Panel - Standard Cabinet

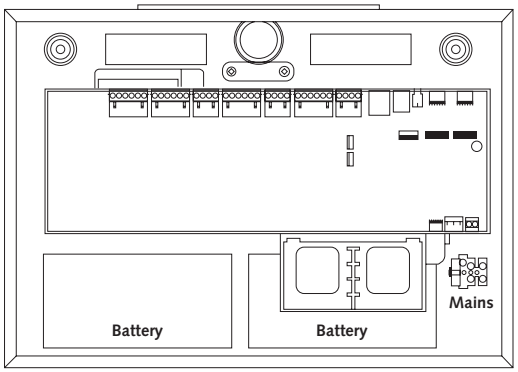
Loops	Height	Width	Depth	Supply	Battery Backup
1	550mm	450mm	171mm	240Vac 3.0A	2 x 12v 18Ah

ZP2-F2-S-03 - 2 Loop Panel - Standard Cabinet

Loops	Height	Width	Depth	Supply	Battery Backup
2	550mm	450mm	171mm	240Vac 3.0A	2 x 12v 18Ah

- Add Part No. ZP2-LB for a 2 Loop Expansion Board
- Two Inputs on-board
- Fire/Fault Contacts on-board
- 24v Sounder Circuits on-board (2 on 1 loop, 4 on 2 loop panels)





ZP2-FR-S-03 - Repeater Panel

Loops	Height	Width	Depth	Supply	Battery Backup
N/A	298mm	410mm	162mm	240Vac 3.0A	2 x 12v 7Ah

- Connects to Panel Network
- Network Card needed for ZP2 main panel

ZM2-18-E

Loops	Height	Width	Depth	Supply
N/A	400mm	400mm	110mm	N/A

ZM2-24-E

Loops	Height	Width	Depth	Supply
N/A	400mm	400mm	200mm	N/A

Z3-40-E

Loops	Height	Width	Depth	Supply
N/A	250mm	450mm	200mm	N/A

1st fix compatibility guide

3a Addressable equipment

3b 24Vdc conventional alarm equipment

3c PSU's and transformer rectifiers

3d Further equipment

3e Disabled refuge & toilet alarm

Standard bases

Only Use:

Z7SB-1 – Surface Sensor Base.

Z7RB-1 – Recessed Sensor Base.

Z7-IB – Combined Sensor Base and Isolator.

Compatible Devices

Z710
Z832
Z720
Z755V
Z730
Z732
Z755-COV (For Blanking Isolator Base)

Sounder bases

Only Use:

Z755SPB-W – Sounder 1st Fix Plate White.

Compatible Devices

Z755B
Z755BV

Compatible Devices

Z710
Z832
Z720
Z755V
Z730
Z755-COV
Z732

Horn sounders/Beacons

Only Use:

Z755SPB-W – Sounder 1st Fix Plate White.

Z755SPB-R – Sounder 1st Fix Plate Red.

Compatible Devices

Z755HAV-2R

Z755HA-2R

Z755HAV-2W

Z755HA-2W

Z7SB-1 - Surface sensor base

Diameter	Depth	Loop Positive	Loop Negative	Screen
108mm	18mm	5	8	7

- Unit designed to be fixed to conduit box or similar with fixing centres 50-90mm apart.
- Devices should have two fixings in the conduit box to avoid the base spinning around when the heads are installed.
- Remote LED connection + on 2, - on 3.

Z7RB-1 - Recessed sensor base

Diameter	Depth	Loop Positive	Loop Negative	Screen
116/138mm	38mm	5	8	7

- Unit designed to be fixed to conduit box or similar with fixing centres 50-90mm apart.
- Devices should have two fixings in the conduit box to avoid the base spinning around when the heads are installed.
- Remote LED connection + on 2, - on 3.
- 120mm clearance hole, ceiling <25mm.

Z755SPB - Sounder 1st fix plate

Diameter	Depth	Loop Positive	Loop Negative	Screen
127mm	47mm	5	6	7

- Unit designed to be fixed to conduit box or similar with fixing centres 50-90mm apart.
- Devices should have two fixings in the conduit box to avoid the base spinning around when the heads are installed.
- Common mounting plate for all addressable sounders. Dimensions shown include base but not horn.
- No remote LED connection.
- W = White. R = Red.

Z7-IB - Combined sensor base & isolator

Diameter	Depth	Loop Positive	Loop Negative	Screen
109mm	23mm	5	6 and 8	7

- Used instead of detector base (Z7SB-1).

Z710 - Ionisation sensor

Diameter	Depth	Loop Positive	Loop Negative	Screen
106mm	52mm*	N/A	N/A	N/A

*Depth dimension excludes base.

- Suitable bases:
  Z7SB-1
  Z7RB-1
  Z755BV
  Z755B
  Z7-IB

Z720 - Heat sensor

Diameter	Depth	Loop Positive	Loop Negative	Screen
106mm	52mm*	N/A	N/A	N/A

*Depth dimension excludes base.

- Suitable bases:
  Z7SB-1
  Z7RB-1
  Z755BV
  Z755B
  Z7-IB

Z730 - Optical sensor

Diameter	Depth	Loop Positive	Loop Negative	Screen
106mm	52mm*	N/A	N/A	N/A

*Depth dimension excludes base.

- Suitable bases:
  Z7SB-1
  Z7RB-1
  Z755BV
  Z755B
  Z7-IB

Z732 - Optical heat sensor

Diameter	Depth	Loop Positive	Loop Negative	Screen
106mm	58mm*	N/A	N/A	N/A

*Depth dimension excludes base.

- Suitable bases:
  Z7SB-1
  Z7RB-1
  Z755BV
  Z755B
  Z7-IB

Z832 - Multi sensor

Diameter	Depth	Loop Positive	Loop Negative	Screen
106mm	58mm*	N/A	N/A	N/A

*Depth dimension excludes base.

- Suitable bases:
  Z7SB-1
  Z7RB-1
  Z755BV
  Z755B
  Z7-IB

ZLP2000 - Addressable beam detector

Port	Depth	Height	Width	Diameter
Tx	110mm			60mm
RX	110mm			60mm
Controller	90mm	260mm	210mm	

- See diagram on page 24.

Z-DPU - Duct detector

Height	Width	Depth	Loop Positive	Loop Negative	Screen
144mm	244mm	85mm	+,+	-,-	*

*Terminate screens to 5 Amp connector block or similar.

◆ See diagram on page 30.

Z-FH/DPU - Duct detector

Height	Width	Depth	Loop Positive	Loop Negative	Screen
130mm	180mm	110mm	5	8	7

◆ See diagram on page 30.

Z785-3 - Manual call point (MCP)

Height	Width	Depth	Loop Positive	Loop Negative	Screen
93mm	89mm	28mm	1 and 3	2 and 4	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Can be semi recessed or surface (with Z785B).
- Do not over tighten.
- Do not foul the test key entry at the bottom of the unit.
- Shallow switch boxes OK.
- Supplied with 2 number 30mm M3 screws.

Z785K - Keyswitch manual call point

Height	Width	Depth	Loop Positive	Loop Negative	Screen
93mm	89mm	28mm	Red	Black	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Can be semi recessed or surface (with Z785B).
- When semi recessing 35mm switch boxes should be used.
- TOK 003 keys used, supplied with 2 number 35mm M3 screws.

Z787 - IP67 manual call point

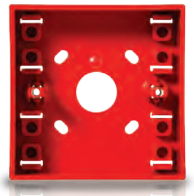
Height	Width	Depth	Loop Positive	Loop Negative	Screen
124mm	124mm	80mm	Left	Right	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Surface only with surface cable installation. Bottom 20mm glands used to retain IP67.

Z785B - Surface box

Height	Width	Depth	Loop Positive	Loop Negative	Screen
89mm	89mm	32mm	N/A	N/A	N/A



Z755HA-2 - Sounder

Diameter	Depth	Loop Positive	Loop Negative	Screen
127mm	112mm	N/A	N/A	N/A

- Units available in white or red and are designed to fit to same colour base (Z755SPB). Horns can be locked with removable clip.

Z755HAV-2 - Sounder beacon

Diameter	Depth	Loop Positive	Loop Negative	Screen
127mm	112mm	N/A	N/A	N/A

- Units available in white or red and are designed to fit to same colour base (Z755SPB). Horns can be locked with removable clip.

Z755B - Sounder base

Diameter	Depth	Loop Positive	Loop Negative	Screen
127mm	47mm	N/A	N/A	N/A

- Designed to fit Z755 SPB.

Z755BV - Sounder beacon base

Diameter	Depth	Loop Positive	Loop Negative	Screen
127mm	47mm	N/A	N/A	N/A

- Designed to fit Z755 SPB.

Z755V - Beacon

Diameter	Depth	Loop Positive	Loop Negative	Screen
106mm	52mm	N/A	N/A	N/A

- Unit designed to fit into detector surface base (Z7SB-1).

Z755WV - 2R - IP65 sounder beacon

Z755WP - IP65 sounder

Height	Width	Depth	Loop Positive	Loop Negative	Screen
127mm	127mm	135mm	+ve loop	-ve loop	Screen

- Use 20mm glands bottom for IP rating. Use the holes provided for fixing.

Z7-IB - Surface base and isolator

Diameter	Depth	Loop Positive	Loop Negative	Screen
109mm	23mm	5	6 and 8	7

- Used instead of detector base (Z7SB-1).

Z60D

Height	Width	Depth	Loop Positive	Loop Negative	Screen
78mm	85mm	28mm	P+	P-	Screen

- For use with ZDIN/ZDIN2 not in 3rd party equipment.

Z752 - Sounder interface

Height	Width	Depth	Loop Positive	Loop Negative	Screen
120mm	120mm	40mm	N/A	N/A	N/A

- Surface mounted with normally 5 number glands required to terminate to this interface.
- Up to 3 number top entry and the rest must be rear entry via conduit box or similar.
- For connections see page 12.

Z70D

Height	Width	Depth	Loop Positive	Loop Negative	Screen
78mm	85mm	27mm	P+	P-	Screen

- See page 19 for wiring details.
- Din mounted unit – Designed to fit into ZDIN1/ZDIN2/ZDIN.
- Interfaces Conventional Detection circuits to the Addressable loop.
- Red LED for active fire condition.
- Yellow LED for conventional line fault.
- Built-In Active EOL for Head Removal monitoring 3K9 Standard EOL.

Z45D - DIN interface

Height	Width	Depth	Loop Positive	Loop Negative	Screen
78mm	45mm	28mm	P+	P-	Screen

- Designed to fit into ZDIN/ZDIN2.
- Monitors clean contacts.
- For connections see pages 17 & 18.

Z51D - Output contact (230Vac)

Height	Width	Depth	Loop Positive	Loop Negative	Screen
80mm	85mm	42mm	P+	P-	Screen

- Designed to fit into ZDIN/ZDIN2.
- Mains must be segregated from unscreened loop cables within the ZDIN. Care should be taken when lives on different phases are switched creating 415Vac within the ZDIN.
- 230Vac 5amp double change over contacts.
- For connections see pages 17 & 19.

Z50D - Output contact

Height	Width	Depth	Loop Positive	Loop Negative	Screen
78mm	85mm	28mm	P+	P-	Screen

- For use with ZDIN/ZDIN2 not in 3rd party equipment.
- 1amp at 30VDC single change over contact.
- For connections see pages 16 & 18.

ZDIN - Enclosure

Height	Width	Depth	Loop Positive	Loop Negative	Screen
200mm	255mm	100mm	N/A	N/A	N/A

- 35mm DIN rail = 244mm long.

ZDIN1 - Enclosure

Height	Width	Depth	Loop Positive	Loop Negative	Screen
110mm	110mm	65mm	N/A	N/A	N/A

- 35mm DIN rail = 90mm long (1 number 85mm units will fit).

ZDIN2 - Enclosure

Height	Width	Depth	Loop Positive	Loop Negative	Screen
110mm	180mm	90mm	N/A	N/A	N/A

- 35mm DIN rail = 145mm long (2 number 85mm units will fit, cable entry is top/bottom only).

CLY200 - Sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	63mm	Common+	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart. Back entry only.
- Switch setting 00010 provides 1st tone sweeping with 2nd tone continuous.

CLY200D - IP65 sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	93mm	Common+	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart. Use designated gland entries (top and bottom) when used externally or IP rating is required.
- Switch setting 00010 provides 1st tone sweeping with 2nd tone continuous.

CLY230 - Bell

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
150mm	80mm	+	-	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart.
- Use internally, entries top and back only.

CLY260 - Sounder base

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
112mm	30mm	+	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart. Back entry only.
- 1st tone sweeping with 2nd tone continuous.

CLY280 - High output sounder

Height	Width	Depth	Alarm Positive	Alarm Negative	Screen
109mm	109mm	95mm	+ve	2nd	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart.
- Use internally, entries top and back only.
- Switch setting 00011000, 2nd tone 988Hz continuous.

CLY407 - Xenon beacon and sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	121mm	+	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart.
- Use designated gland entries (top and bottom) when used externally or IP rating is required.
- 1st tone sweeping with 2nd tone continuous.

CLY400 - Xenon beacon

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	106mm	+	-	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart.
- Use designated gland entries (top and bottom) when used externally or IP rating is required.

CLY408 - LED beacon and sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	78mm	Common +	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart.
- Switch setting 00010 provides 1st tone sweeping with 2nd tone continuous.

CLY408D - IP65 beacon and sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	108mm	Common +	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- Fixing centres 50-60mm apart.
- Use designated gland entries (top and bottom) when used externally or IP rating is required.
- Switch setting 00010 provides 1st tone sweeping with 2nd tone continuous.

Z-FA4 - Multi-message voice sounder

Height	Width	Depth	Loop Positive	Loop Negative	Screen
134mm	86mm	57mm	+ In/Out	- In/Out	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See pages 28 & 29 for wiring details.
- Fixing diameter of 60mm.
- IP44 rating.

Z-FC3-S - Voice Sounder c/w Beacon

Height	Width	Depth	Loop Positive	Loop Negative	Screen
134mm	86mm	60mm	+ In/Out	- In/Out	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See pages 28 & 29 for wiring details.
- Fixing diameter of 60mm.
- IP44 rating.

Z-FC3-D - Voice Sounder Beacon Deep Base

Height	Width	Depth	Loop Positive	Loop Negative	Screen
136.5mm	88mm	83mm	+ In/Out	- In/Out	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See pages 28 & 29 for wiring details.
- Fixing diameter of 50mm.
- IP66 rating (use bottom gland holes and IP glands only).

FC3/B - Voice Sounder Midi

Height	Width	Depth	Loop Positive	Loop Negative	Screen
128mm	147mm	123mm	+ In/Out	- In/Out	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See pages 28 & 29 for wiring details.
- For use in indoor large open areas/warehouses etc.
- 4 x fixing points 85.8mm apart.
- IP44 rating.

FC3/D - Voice Sounder Maxi

Height	Width	Depth	Loop Positive	Loop Negative	Screen
128mm	147mm	123mm	+ In/Out	- In/Out	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See pages 28 & 29 for wiring details.
- For use in outdoor or in indoor large open areas/warehouses etc.
- 3 x fixing points 30mm apart on arm.
- IP67 rating (use gland holes and IP glands only).

FC3/C/I - Mini Fire-Cryer Base Sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
102mm	24mm	Common +	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See pages 28 & 29 for wiring details.
- Fixing Diameter of 57.5mm.
- Fits underneath standard detector bases or with optional front plate can be used as standalone fitment.
- Only use in small rooms/offices/hotel bedrooms etc.

ZC/1/3 - Power supply unit

Height	Width	Depth
230mm	320mm	80mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZC/1/7 - Power supply unit

Height	Width	Depth
230mm	320mm	80mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZC/3/12 - Power supply unit

Height	Width	Depth
400mm	400mm	110mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZC/5/18 & ZC/5/EN - Power supply unit

Height	Width	Depth
400mm	400mm	110mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZC/10/12 - Power supply unit

Height	Width	Depth
400mm	400mm	200mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZH/15/3 - Power supply unit

Height	Width	Depth
300mm	400mm	80mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZH/10/40 - Power supply unit

Height	Width	Depth
500mm	450mm	200mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZH/3/7 - Power supply unit

Height	Width	Depth
300mm	400mm	80mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZH/20 - Power supply unit

Height	Width	Depth
500mm	450mm	200mm

- Batteries in separate box (ZH/68/E) 1 number 2 core 2.5mm cable required.

ZH/5/24 - Power supply unit

Height	Width	Depth
500mm	450mm	200mm

- Ensure the cables do not enter near the position for the batteries (bottom half). There is generally enough space for small interface equipment such as Z45D, Z570, Z51D.
- All PSU's require un-switched fused spurs connected to radials from the main electrical distribution board.

ZH/68/E - Battery enclosure

Height	Width	Depth
500mm	450mm	200mm

- Used with ZC/5/EN for 72 hours standby. See page 13.

ZN/17 - Transformer rectifier (0.375A)

Height	Width	Depth
115mm	155mm	76mm

- Surface mounting with cable top, side or bottom, not back entry.
- All transformer rectifiers require un-switched fused spurs connected to radials from the main electrical distribution board.
- Output is 24Vac and only suitable for powering door holders or other equipment with this specified voltage type.

ZN/18 - Transformer rectifier (1.5A)

Height	Width	Depth
200mm	255mm	100mm

- Surface mounting with cable top, side or bottom, not back entry.
- All transformer rectifiers require un-switched fused spurs connected to radials from the main electrical distribution board.
- Output is 24Vac and only suitable for powering door holders or other equipment with this specified voltage type.

ZN/16 - Transformer rectifier (3A)

Height	Width	Depth
200mm	255mm	100mm

- Surface mounting with cable top, side or bottom, not back entry.
- All transformer rectifiers require un-switched fused spurs connected to radials from the main electrical distribution board.
- Output is 24Vac and only suitable for powering door holders or other equipment with this specified voltage type.

ZREDCARE/BOX - Redcare enclosure

Height	Width	Depth
245mm	230mm	80mm

- Surface mounted enclosure for 24Vdc Redcare communicator.
- 24Vdc supply from panel/PSU and 1 number 2 core cable for fire.
- Any cable entry.
- Schematic shown on page 8.

Z67 - IP heat sensor

Diameter	Depth	Zone Positive	Zone Negative	Screen
98mm	50mm	Red	Blue	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- No base required.
- Flying leads from the back of the detector.
- 70mm fixing centres do not allow fixing to conduit box. Applications where a back box is needed a Red Alert box should be used eg YCR/502.
- For use with Z70D see page 19.

CLY485 - Remote LED

Height	Width	Depth
85mm	85mm	25mm

- LED c/w legend on a single gang switch plate. Terminate +'s to number 2 (middle) and -'s to number 3 (right).

CLY410 - Door holder (24Vdc)

Height	Width	Depth
95mm	95mm	45mm

- 24Vdc unit. Rear entry with conduit box otherwise bottom or side entry only and terminate +ve's and -ve's as shown.
- Rated holding force 112 newtons or 11.5Kg's.
- Schematic shown on page 16.

CLY420 - Door holder (230Vac)

Height	Width	Depth
95mm	95mm	45mm

- 230Vac unit. Rear entry with conduit box otherwise bottom or side entry only and terminate LEN shown.
- Rated holding force 112 newtons or 11.5Kg's.
- Schematic shown on page 17.

996 - Door holder (24Vac)

Height	Width	Depth
64mm	305mm	92mm

- Dimensions relate to main body of the unit only.
- Swing free and 24Vdc magnetic hold open for doors up to 950mm and 60Kg's.
- Fitted on pull side of the door near the hinges and the external switched 24Vdc terminated to the red and black connections.

CLY475B - 230Vac relay

Height	Width	Depth
110mm	110mm	58mm

- Surface mounted top, side or bottom cable entry.
- Relay has a 230Vac coil and double pole change over contacts rated 230Vac 5amp (2.5amp for inductive loads).

ZKEY2 - Keyswitch

Height	Width	Depth
82mm	80mm	55mm

- 2 position surface key switch labelled "plant isolate control" with "normal" and "isolate" as selectable functions using a normally open going closed switch.
- Rated 230Vac 5amp but typically used with Z745, Z740 or Z45D.

CLY495B - 24Vdc relay

Height	Width	Depth
110mm	110mm	58mm

- Surface mounted top, side or bottom cable entry.
- Relay has a 24Vdc coil and double pole change over contacts rated 230Vac 5amp (2.5amp for inductive loads).

Z841 - Class change unit

Height	Width	Depth
110mm	230mm	45mm

- Surface mounted only.
- The unit requires 230Vac and link to Z740/Z45D or to the panel.
- The box will not accept a 20mm gland, cable entry possible top, bottom, left or rear.

Z2000 - Conventional beam detection

Port	Depth	Height	Width	Diameter
Tx	110mm			60mm
Rx	110mm			60mm
Controller	90mm	260mm	210mm	

- Additional information from the installation helpline – 0844 412 1777.
- See diagram on page 24.

CLY517 - Conventional IP MCP

Height	Width	Depth
124mm	124mm	80mm

- Used typically in cold stores with interface to addressable loop.
- Surface mounting only with surface cable installation.
- Bottom 20mm glands used to retain IP67.

Z440 - Rotating beacon

Diameter	Depth
120mm	200mm

- 230Vac unit mounted in an up right position for IP rating and effective use. The unit is supplied with "o" ring and gasket for IP rating.
- For interfacing/ monitoring requirements call the installation helpline – 0844 412 1777.

UV/IR - Flame detection

Height	Width	Depth
142mm	108mm	82mm

- All information can be provided by the installation helpline – 0844 412 1777.

Z805 - Radio modem

Height	Width	Depth
185mm	114mm	30mm

- All information can be provided by the installation helpline – 0844 412 1777.

ZNLINK - Interface

Height	Width	Depth
110mm	110mm	58mm

- Surface mounting unit that gives a two way signal, over a 2 core cable, between panels.
- One Znlink per panel, maximum 10 panels.
- Six core required between Znlink and local panel.
- Panel specification – Aux 24Vdc supply, none latching zone/class change, spare sounder cct.

Z-DP672 - I.S. Optical Smoke Detector

Diameter	Depth	Loop Positive	Loop Negative	Screen
100mm	42mm	N/A	N/A	N/A

- See diagram on page 26 for more information.
- Depth dimension including base 100mm x 50mm.
- Suitable base Z-DB670.

Z-DB670 - Time Saver Base

Diameter	Depth	Loop Positive	Loop Negative	Screen
105mm	10mm	IN + OUT +	COM	4

- See diagram on page 26 for more information.
- Used connect I.S. only detectors to a Intrinsically Safe Conventional circuit.
- Remote LED connection + on 'IN +' – on 'LED -'.
- Fixing diameters of 51mm, 60mm or 72mm.

Z-DT673/674/678 - I.S. Heat Detectors

Diameter	Depth	Loop Positive	Loop Negative	Screen
100mm	42mm	N/A	N/A	N/A

- See diagram on page 26 for more information.
- Z-DT673 – A2S class – 50c Fixed Temp.
  Z-DT674 – A2R class – 50c RoR.
  Z-DT678 – CS class – 80c Fixed Temp.
- Depth dimension including base 100mm x 50mm.
- Suitable base Z-DB670.

ZC6-MCP-IS - I.S. Surface Call Point

Height	Width	Depth	Loop Positive	Loop Negative	Screen
94mm	98mm	70mm	N/A	N/A	N/A

- See diagram on page 26 for more information.
- Back box included.
- Depth dimension is including back box.

Z-DP672T - I.S. Multi Sensor Detector

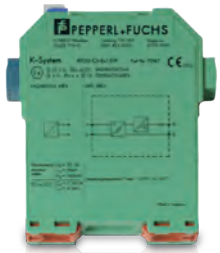
Diameter	Depth	Loop Positive	Loop Negative	Screen
100mm	50mm	N/A	N/A	N/A

- See diagram on page 26 for more information.
- Depth dimension including base 100mm x 60mm.
- Suitable base Z-DB670.

GBX70 - Galvanic Isolator

Height	Width	Depth	Loop Positive	Loop Negative	Screen
107mm	20mm	115mm	N/A	N/A	N/A

- See diagram on page 26 for more information.



MTL5025 - Galvanic isolator

Height	Width	Depth	Loop Positive	Loop Negative	Screen
104mm	16mm	110mm	N/A	N/A	N/A

- See diagram on page 26 for more information.

DB5 - Sounder

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
93mm	103mm	Common +	1st or 2nd tone	*

*Terminate screens to 5amp connector block or similar (not to building earth).

- See diagram on page 26 for more information.
- Fixing centres 50-60mm apart. Back entry only.
- Switch setting 00010 1st tone sweeping and 2nd tone continuous.

XB8024-S-NR - Beacon

Diameter	Depth	Alarm Positive	Alarm Negative	Screen
140mm	107mm	+	-	*

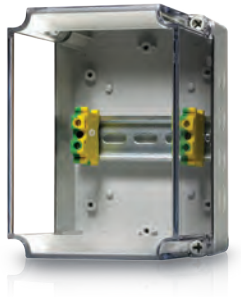
*Terminate screens to 5amp connector block or similar (not to building earth).

- See diagram on page 26 for more information.

DX070 - Enclosure

Height	Width	Depth	Loop Positive	Loop Negative	Screen
175mm	125mm	150mm	N/A	N/A	N/A

- See diagram on page 26 for more information.



RS1/F - 1 Way Refuge Panel Flush

Refuge Points	Height	Width	Depth	Supply	Battery Backup
1	300mm	210mm	75mm	240Vac/5.0A	1x12v/3.2Ah

- See page 35 for wiring details.
- Comes complete with single Refuge Unit Part No.
- Single Call active LED.
- Fault relay output on-board.
- Active Call relay output on-board.
- Anti-Tamper input on-board.

CDC/L or R/RS4F - 4 Way Refuge Panel Flush

Refuge Points	Height	Width	Depth	Supply	Battery Backup
4	403mm	403mm	83mm	240Vac/5.0A	2x12v/3.2Ah

- See pages 34 & 35 for wiring details.
- Loop or Radial Wiring Configuration types available.
- Call active LED per Refuge Point.
- Fault relay output on-board.
- Active Call relay output on-board.
- Anti-Tamper input on-board.
- Can be interfaced with optional toilet alarm kits - add part no. TC4 to include additional LED's to panel needed for this.
- Back-box size for flush mounting H360mm W360mm D75mm.

CDC/L or R/RS8F - 8 Way Refuge Panel Flush

Refuge Points	Height	Width	Depth	Supply	Battery Backup
8	400mm	500mm	100mm	240Vac/5.0A	2x12v/7Ah

- See pages 34 & 35 for wiring details.
- Loop or Radial Wiring Configuration types available.
- Call active LED per Refuge Point.
- Fault relay output on-board.
- Active Call relay output on-board.
- Anti-Tamper input on-board.
- Can be interfaced with optional toilet alarm kits - add part no. TC8 to include additional LED's to panel needed for this.
- Back-box size for flush mounting (H)360mm (W)460mm (D)98mm.

CDC/L or R/RS16F - 16 Way Refuge Panel Surface

Refuge Points	Height	Width	Depth	Supply	Battery Backup
16	600mm	520mm	150mm	240Vac/5.0A	2x12v/12Ah

- See pages 34 & 35 for wiring details.
- Also available in 32, 48 & 64 way variants + larger on special order.
- Loop or Radial Wiring Configuration types available.
- Call active LED per Refuge Point.
- Fault relay output on-board.
- Active Call relay output on-board.
- Anti-Tamper input on-board.
- Can be interfaced with optional toilet alarm kits - add part no. TC16 to include additional LED's to panel needed for this.
- Flush mount kit available.

RCO/SS - Refuge Type B Handset

Refuge Points	Height	Width	Depth	Supply	Battery Backup
1	264mm	189mm	50mm	N/A	N/A

- See pages 34 & 35 for wiring details.
- Compatible with both Loop or Radial wiring types.
- Call Button to activate Main Panel.
- Call active LED.
- Must include part no. FH/BB for flush mount box or SH/BB for surface mount box.
- Back-box size for flush mounting (H)230mm (W)155mm (D)55mm.
- Built-in connection for interfaced with optional toilet alarm kit on loop wired type systems.

RCO/SS/IP65 - Refuge Type B Handset IP65

Refuge Points	Height	Width	Depth	Supply	Battery Backup
1	265mm	190mm	90/65mm	N/A	N/A

- IP65 weatherproof version – surface mount only.
- See pages 34 & 35 for wiring details.
- Compatible with both Loop or Radial wiring types.
- Call Button to activate Main Panel.
- Call active LED.
- Built-in connection for interfaced with optional toilet alarm kit on loop wired type systems.

RCO/SS - Refuge Type B Handset

Refuge Points	Height	Width	Depth	Supply	Battery Backup
1	264mm	189mm	50mm	N/A	N/A

- See pages 34 & 35 for wiring details.
- Compatible with both Loop or Radial wiring types.
- Call Button to activate Main Panel.
- Call active LED.
- Must include part no. FH/BB for flush mount box or SH/BB for surface mount box.
- Back-box size for flush mounting (H)230mm (W)155mm (D)55mm.
- Built-in connection for interfaced with optional toilet alarm kit on loop wired type systems.
- Built-in Induction loop for hearing impaired.

HARK1 - Disabled WC Kit

Unit	Height	Width	Depth	Supply	Battery Backup
Lamp/Sounder/ PSU (S/Steel)	87mm	146mm	2mm	240Vac/5.0A	N/A
Lamp/Sounder/ PSU (White)	87mm	87mm	10mm	240Vac/5.0A	N/A
Reset Unit	87mm	87mm	2/10mm	N/A	N/A
Pull Cord	87mm	87mm	2/10mm	N/A	N/A

- See page 36 for wiring details.
- Each Unit fits standard single gang boxes (Stainless Steel Overdoor Lamp fits a double gang box).
- Kit comes complete with back-boxes for surface mount option – Note Stainless types are flush mount only.
- Includes a Pull cord which activates the Lamp/Sounder unit and a rest unit to restore the system.
- 12v Call Active Output for connecting to the disabled refuge system above or a 12v relay for a dry contact output.
- Extra Pull Cords can be fitted to each toilet alarm system.

NC910 - 10 Zone Toilet Alarm Panel

Alarm Circuits	Height	Width	Depth	Supply	Battery Backup
10	178mm	214mm	70mm	240Vac/3.0A	N/A

- See page 39 for wiring details.
- Surface or Flush Mounting suffix part no. with S or F.
- Flush backbox dimensions (H)162mm x (W)1176mm x (D)55mm.
- For battery backup order separate PSU part no. BF360-12.
- LED per Toilet Alarm Circuit/Zone.
- Integrated Alarm Buzzer.
- Labelling space for each zone.

NC920 - 20 Zone Toilet Alarm Panel

Alarm Circuits	Height	Width	Depth	Supply	Battery Backup
20	178mm	214mm	70mm	240Vac/3.0A	N/A

- See page 39 for wiring details.
- Surface or Flush Mounting suffix part no. with S or F.
- Flush backbox dimensions (H)162mm x (W)1176mm x (D)55mm.
- For battery backup order separate PSU part no. BF360-12.
- LED per Toilet Alarm Circuit/Zone.
- Integrated Alarm Buzzer.
- Labelling space for each zone.

NC942B - Single Zone Controller c/w PSU

Alarm Circuits	Height	Width	Depth	Supply	Battery Backup
1	87mm	147mm	39mm	240Vac/3.0A	Built in Rechargeable

- Enable a single toilet alarm to be connected.
- See page 37 for wiring details.
- Mounts to a standard Double Gang Box.
- Zone active LED indication.
- Integrated Alarm Buzzer.
- Integrated Reset Button.
- Stainless Steel version available (suffix part no. with SS).

NC809DB - Button Reset Point

Alarm Circuits	Height	Width	Depth	Supply	Battery Backup
N/A	87mm	87mm	24mm	12Vdc from panel	N/A

- See pages 37-39 for wiring details.
- Connects to either the single zone or Multi Zone toilet alarm panel.
- Mounts to a standard Single Gang Box.
- Red LED for zone active indication.
- Stainless Steel version available (suffix part no. with SS).

NC806C - Overdoor Light/NC807CS - w/Sounder

Alarm Circuits	Height	Width	Depth	Supply	Battery Backup
N/A	87mm	87mm	68mm	12Vdc from panel	N/A

- See pages 37-39 for wiring details.
- Connects to either the single zone or Multi Zone toilet alarm panel.
- Mounts to a standard Single Gang Box.
- Ultra Bright Red LED's for Zone Active Indication.
- Stainless Steel version available (suffix part no. with SS).

NC807C - Pull Cord Unit

Alarm Circuits	Diameter	Depth	Supply	Battery Backup
N/A	93mm	27mm	12Vdc from panel	N/A

- See pages 37-39 for wiring details.
- Connects to either the single zone or Multi Zone toilet alarm panel.
- Surface mount only.
- Red LED illumination for zone active indication.

4 System commissioning

To ensure the system commissioning runs as smoothly as possible we would request that the following points have been observed prior to booking the commissioning visit.

1. 7 working days notice for commissioning visit.
2. As-fitted drawings marked up with address numbers.
3. Text label sheets complete at the time of booking the commissioning.
4. Any specific system configuration identified.
5. Loop complete and tested for continuity on both cores and screen.
6. No cable faults exist (short cct between cores, cores to screen or cores to building earth).
7. Cables terminated to the panel have each core correctly flagged.
8. Access equipment and operator available for our use.
9. Zone charts require 3 weeks notice and a disk copy of the AutoCad drawings.
10. All equipment is fitted that is directly connected to the cable installation i.e. sounder 1st fix plates, sensor base, MCP's interfaces. All plug-in devices that require addressing will be fitted by Clymac.
11. Free use of welfare facilities, light, power etc.
12. Clymac endeavour to work with personnel on site to overcome most problems. Assistance may be required to fix cable faults, fitting sensors etc, drive access equipment and connect mains.

5 Contact details

Installation support helpline
0844 412 1777

Book commissioning
01509 232651

Office fax
01509 232665

Email
commissioning@clymac.co.uk

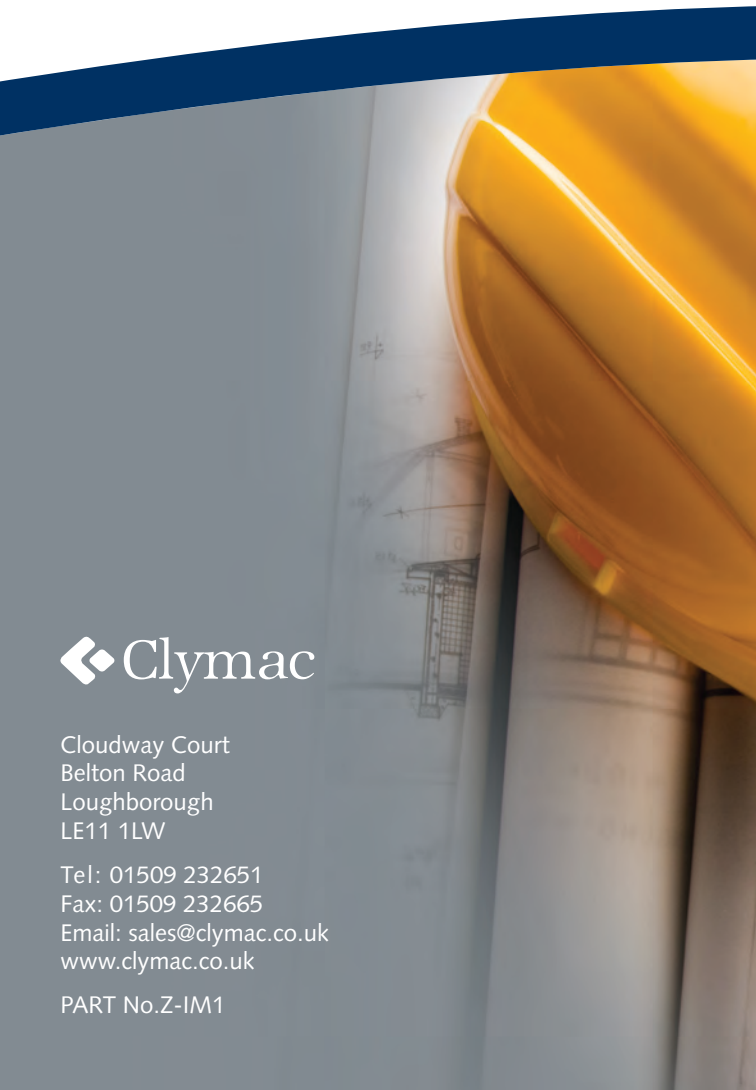
Web
www.clymac.co.uk

LPS 1014 Certificated Fire Detection and Alarm System Firm Certificate No CFA-154

LPS 1204 Certificated Fixed System Installer Certificate No. CFSI-018

Assessed to ISO 9001:2000 Certificate No. 687

Certificate No. NAC/G/3213



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